

**Remarks as prepared for  
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**For the AMERICAN PUBLIC HEALTH ASSOCIATION  
131<sup>ST</sup> Annual Meeting & Exposition**

**“Public Health and the Epidemic of Motor Vehicle Crashes”**

**Special Session, Tuesday, November 18, 2003**

- Thank you Dr. Caine for the introduction.  
[Virginia Caine, M.D., APHA President-elect and Director of the Marion County, Indiana, Health Department]
- *(title slide)* Pleased to here today as head of the only designated public health agency in the US Dept of Transportation. This is not my first time at APHA. I have attended past meetings and am familiar with your work.
- *(Slide #2: MV Crashes as Leading Cause of Death)* It is the data that drive traffic injury to the forefront of public health.
- Anyone recognize this slide? It is the CDC Leading Cause of Death chart that has been re-worked to split out motor vehicle traffic injuries from the other causes of unintentional injury.
- This tells the whole story.
- Traffic crashes are *the leading cause of death for all age groups from 4 – 34 years of age.*
- If you look at individual years of life it is even worse – *traffic crashes are the leading killer of children starting at age 2.*
- This is what is killing our young people, killing our children, this is the 3<sup>rd</sup> leading cause of years of potential life lost for all ages combined – *this is **the** issue that needs the attention of the public health community.*
- There is a public health epidemic of highway death in this country.
- As members of the public health community you play an essential role in reducing death and injury from these preventable events.
- My message to you today is this: traffic injury prevention **IS** public health. It is everything you were already trained to do and more.

- **(Slide #3: Epidemiological Triad)** Now that I showed you the problem I want you to understand that this is a disease and that we have interventions.
- Traffic safety is not just a transportation problem. It is a public health problem of epidemic proportions. Even more than that, *traffic injury is a disease*. But it is a disease with a cure.
- But most of us in public health and medicine weren't trained to think in terms of highway crashes.
- *Traffic injury follows the same epi triad* that is already familiar to you. You will recognize the components – host, agent, environment.
- But until everyone comes to this understanding, traffic fatalities will continue to be seen simply as “God’s will”, the cost we pay as a society for our mobility.
- Injury causes trauma and *must be recognized as a disease process*. Like heart disease and cancer, trauma has identifiable causes, established means of treatment, and defined means of prevention.
- Even though *injury is a communicable disease*, we have immunizations and cures.
- **(Slide #4: Haddon Matrix)** Dr. Bill Haddon, the first Administrator of the National Highway Traffic Safety Administration and a pioneering public health physician, created an approach to highway injury that recognizes the 3 components of the epi triad that occur along the crash timeline.
- His framework represented a new way of thinking about injury prevention. Before that injury was regarded the same way that other diseases have been regarded throughout human history. Aligning injuries according to these timeframes allowed us to identify opportunities for intervention.
- We must take the lessons of chronic disease epidemiology and apply them to traffic injury.
- Your work in the public health field puts you solidly in the left column of this table. It is factors in the pre-injury phase where you can have the greatest impact. Intoxication, safety belt use, EMS – this is where you can make the greatest difference and save the most lives.
- **(Slide #5: Persons Killed and Injured in Crashes)** *The data tell the story:* nearly 43,000 people killed, 2.9 million more injured. Most of these were preventable crashes, preventable outcomes.

- **(Slide #6: photo of Bush and Mineta)** Both President Bush and Secretary of Transportation Norm Mineta have made clear that *safety is their #1 transportation priority*.
- They have told us to apply the sense of urgency and priority to fixing this problem as was applied when Congress directed us to solve the aviation security problem following 9-11. And we are doing so. But we need national focus.
- **(Slide #7: Persons Killed and Rate per 100m VMT)** We have made tremendous progress since we started working on highway safety back in the mid 60s. We brought the fatality rate down since that time from 5.5 deaths per 100 million VMT to 1.51 deaths per 100 million VMT today.
- The fatality rate has declined even while the number of people killed has held fairly level. This is the result of exposure increases: growth in vehicle miles traveled, general population and number of licensed drivers.
- But even with this progress there are still about 117 people killed daily. *These numbers should be cause for outrage among the public health community.* Instead we tend to get fired up about other outbreaks – food borne illnesses such as Mad Cow or violence.
- **(Slide #8: Fatality Goal)** *This is our goal* – to reach a level of not more than 1.0 deaths per 100M VMT by 2008. *This will require a full-out effort* across the country, since today's fatality rate is 1.51 per 100M VMT.
- **(Slide #9: Economic Cost of Crashes)** If the numbers don't cause outrage consider the costs: *more than \$230 billion total each year*, including:
  - nearly \$33 billion in medical treatment costs;
  - \$51 billion for impaired driving; and
  - \$20 billion for people who continue to refuse to use safety belts.
- The overall financial costs include lost income, family medical expenses, and burden of caring for family members, but these costs pale in comparison to the on-going pain and suffering by crash victims and their families.
- **(Slide #10 – Predicted Lives Saved by Countermeasure)** *Everything we do at NHTSA is data-driven.* It is the numbers that set the direction for current goals and priorities.
- We did an analysis of potential lives that could be saved by implementing different countermeasures. We found that *about 2/3 of the lives that can be saved would come from just 2 areas: increasing safety belt use and reducing impaired driving.*
- The final 1/3 represents everything else combined, from eliminating roadway departures to improving truck safety.

- *The data made absolutely clear what our priorities must be. Increasing safety belt use and reducing impaired driving must be at the top of the list.*
- **(Slide #11: Highway Safety Priorities)** There are a few key areas where we can concentrate our resources to achieve the best results. Today I will just talk about the first 3 on this list, those that affect the public health community.
- **(Slide #12: Highway Safety Priorities/ Belts)** The national belt use rate was recently measured at 79%, an all-time high.
- *Safety belts are readily available at no additional cost to drivers and are highly effective in preventing injuries and fatalities.* Last year alone safety belts prevented more than 14,000 fatalities and more than 300,000 serious injuries.
- By contrast, those who still don't buckle up suffered more than 7,000 deaths, nearly 100,000 serious injuries, and cost the economy more than \$20 billion.
- *The benefits are profound.* We estimate that every 1% increase in national safety belt use results in 2.8 million new belt users and more than 270 lives saved.
- **(Slide #13: Histogram w/ primary & secondary belt use)** There are 2 kinds of safety belt laws in this country, primary and secondary. The public's compliance varies greatly depending on which type of law is in effect in their state.
- *Belt use is higher in primary states than in secondary states.*
- **(Slide #14: Map of primary/secondary states)** This map shows the primary and secondary states.
- **(Slide #15: Highway Safety Priorities/Impaired Driving)** Today I will focus mainly on impaired driving.
- My own background is in emergency medicine, and I know that my colleagues in both medicine and public health can do more to reduce impaired driving.
- **(Slide #16: Alcohol Related Fatalities US)** *More than 17,400 died in alcohol-related crashes last year.*
- *Alcohol is the most commonly used drug in the U.S. and a leading cause of morbidity and mortality.* About 2/3 of injured patients who were BAC positive and treated in emergency departments have an alcohol abuse or alcohol dependence diagnosis.
- **(Slide #17: BAC Levels for Alcohol Positive Drivers in Alcohol-Related Fatal Crashes)** This shows where the bulk of the problem is – the high BACs right in the middle.

- **(Slide #18: Alcohol-Related Fatality Rate)** Until about 1994 the nation was making great progress in reducing alcohol related fatalities. Since that time progress has stalled.
- With a tremendous boost from organizations such as MADD and state laws such as the minimum drinking age, in the 1980s and early 90s the considerable reduction in alcohol-related fatalities became an American success story.
- Last year the numbers remained pretty flat while the rate declined just slightly, to .62 per 100m VMT.
- Since 1994 the number of people killed in alcohol-related crashes has either remained level or even increased slightly. Our goal is to reach a level of not more than .53 deaths per 100m VMT by the end of 2004.
- **(Slide #19: Strategies for Reducing Impaired Driving)** *Alcohol impairment is a complex social problem* with a range of potential countermeasures. But to break through and make real progress, we need to focus our energy on a few critical areas. I would like to ask your help in pursuing 3 priority initiatives.
- *The public must perceive that if you drive impaired you will be caught. No exceptions. No excuses.*
- *High visibility enforcement has proven effective* in creating this perception. Sobriety checkpoints or saturation patrols, combined with paid or earned media, are among the most effective ways to reduce impaired driving.
- *Nearly 97% of Americans view impaired driving as a threat* to their community. Americans consider it to be one of the nation's most important social issues ahead of healthcare, poverty/hunger, racism and education. They support enforcement as well as stricter and severe penalties.
- The general deterrence message does not work for everyone.
- There were 1.5 million arrests for DWI in 2001. This was second only to 1.6 million arrests for substance abuse-related crimes.
- *This is a violent crime that doesn't get enough attention in our communities.*
- One part of the problem is DWI prosecution. Many prosecutors are new and inexperienced. They "cut their teeth" on DWI cases until they move on to "more serious" crimes. They need training and access to mentors with more DWI case experience.
- *DWI cases are complicated. They both need and deserve experienced prosecutors.*

- Specialized DWI courts are effective in improving case management. They have been successful in many areas, including helping to achieve a reduction in recidivism. We need your support to encourage judges to create more dedicated DWI courts.
- **(Slide #20: Priority – Screening and Brief Intervention)** A third priority is screening and brief intervention
- This is really quite simple. It involves the physician or other healthcare provider asking a few questions to determine if the patient has an alcohol problem, then referring those who need it for assessment and possible treatment.
- There are several tools that can be used for this purpose. The CAGE, TWEAK, AUDIT and others – used in different settings for a similar purpose – to provide an opportunity for the health professional and patient to talk about alcohol use, allowing for screening and/or brief intervention.
- In these settings unless you ask screening questions and add a referral if needed, none of us are doing our job.
- There is compelling evidence in scientific and medical literature that shows that screening and brief intervention is effective in decreasing alcohol consumption among problem drinkers.
- This is an area where you can have the greatest impact. We need to make sure that health care providers practice alcohol screening with their patients as a regular part of routine care.
- Public health professionals are in an ideal position to do risk assessment. You are in people's homes, you see the risk factors – throw rugs, space heaters, or beer bottles. In these situation you can help identify people who need screening and brief intervention.
- This is similar to the situation of a decade or so ago, where pediatricians began to ask parents about bicycle helmets and child safety seats as a routine part of well-child check-ups. Pediatricians now do this regularly. Alcohol screening needs to follow a similar track until it too becomes part of normal, routine care.
- **(Slide 21: Highway Safety Priorities/Improve Data)** My last priority area for this morning is improvements to state and local data.
- **(Slide 22: State and Community Data Traffic Data)** Data not only guide our programs, but the data we need to justify and fund injury prevention also speaks more loudly and clearly than any of us can.
- Public health professionals play an important role in traffic safety program design. You provide much of the data that allow us to identify problems and create countermeasures. Your data allow us to evaluate the interventions, to chart our progress.

- We need accurate E-coding of injuries so we can identify problems and measure program effect. We need routine testing of traffic fatalities for blood alcohol content so we can monitor the impaired driving problem.
- There are rich sources of data available to you at the state local level that document the traffic injury problem – hospital, police, EMS, trauma registry – all that support traffic injury intervention.
- Someone has to take the lead in a community to prevent traffic injury. Why not you? For those of you who already are involved in community coalitions, you can use these data to assess risk.
- **(Slide #23: Safe Communities web site)** There are data and tools available to help. The best programs occur locally where you have influence as health professionals. The model we use is Safe Communities – relying on data-driven, focused resources.
- Data should drive your programs, and the Safe Communities approach emphasizes the use of local data, combined with broad citizen involvement, expanded partnerships, and an integrated approach to injury control.
- NHTSA produces a number of publications and maintains a web site and a service center to help support the more than 1000 local Safe Communities coalitions.
- **(Slide #24: Traffic Safety IS Public Health)** Traffic safety IS public health. There are few things you could do that would have more effect – and an *immediate effect* - on the health of your communities than actively promoting safety belt use and engaging yourself in efforts to reduce impaired driving.
- What I have talked about today is a complex problem and not one of us can solve it alone. It will take all of us working, including at the local level, to see real results that will save lives from this most commonly committed crime.
- **(Slide #23: NHTSA logo)** We need a commitment from everyone.
  - Advocacy – what public health people do best
    - Safety Belt Use
    - Alcohol Screening
    - Community Coalition Building
- We are asking you to take this on, to use the social workers and public health nurses and everyone in your health departments to stop this epidemic, this top cause of child death, this leading killer of teens.
- Remember - when your health department sponsors a child safety seat clinic or conducts alcohol screening, your are contributing to the nation’s public health agenda.

- Stop by our exhibit and sign up. We will send you whatever you need to bring traffic safety to your own community.
- Thank you for inviting me here to be with you today.